1995 ARIZONA BEHAVIORAL RISK FACTOR SURVEY ANNUAL REPORT

EPIDEMIOLOGIC REPORT

Fife Symington, Governor
State of Arizona

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BEHAVIORAL RISK FACTOR SURVEY (BRFS)
1995 ANNUAL REPORT

ARIZONA DEPARTMENT OF HEALTH SERVICES
DISEASE PREVENTION SERVICES

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EXECUTIVE SUMMARY

In 1981, the Centers for Disease Control and Prevention (CDC) began developing a Behavioral Risk Factor Surveillance System (BRFSS) as a method of assessing the prevalence of high risk health behaviors at the state level. Arizona's BRFS was established in 1982 by the Arizona Department of Health Services (ADHS) through a cooperative agreement with the CDC.

Arizona has actively participated in the BRFSS program since 1984. Since then, the personal health habits of the adult population of Arizona have been monitored annually through an ongoing monthly telephone survey.

Data from BRFS have been used by state and local health agencies for program planning. The ADHS integrated BRFS data into its planning functions and as a reference to other epidemiological applications. In addition, BRFSS data has supported county health department staff in determining and justifying budgetary needs for health promotion and education. The BRFS program continues to be a rich source of unique state level public health data which have become an integral part of overall health promotion and disease prevention/intervention planning.

This report examines behaviors reported in 1995 related to the development of cardiovascular disease (smoking, overweight and sedentary lifestyles), alcohol abuse (binge, chronic and drinking and driving), health care access, fruit and vegetable consumption, the use of seat belts, mammography, diabetes, and weight control. The data have been analyzed by the CDC and weighted to match the state's 1995 census data for age and gender, thus providing estimates of the risk factor prevalence among Arizona adults.

1995 BEHAVIORAL RISK FACTOR SURVEY HIGHLIGHTS

Behavioral Risk Factor Survey Risk Factors by Demographics - Arizona - 1995						
Risk Factors (Prevalence)	Reported Groups at Highest Risk					
	Sex/Age	Race/ Ethnicity	Marital Status	Income	Employment Status	Education Level
Binge (Acute) Drinking (13.5%)	Males/25-34 (33.0%) Females/18-24 (14.2%)	Hispanic (18.3%)	Unmarried Couple (23.3%)	$25 - $34,999 (21.8%)	Student (33.6%)	Some College (16.5%)
Chronic Drinking (2.4%)	Males/18-24 (8.4%) Females/45-54 (1.3%)	White (2.8%)	Never Married (6.1%)	$25 - $34,999 (4.6%)	Employed for Wages (3.1%)	Some College (3.1%)
Drinking & Driving (2.7%)	Males/25.34 (7.1%) Females/35-44 (5.0%)	White (3.0%)	Never Married (6.2%)	$25 - $34,999 (6.1%)	Employed for Wages (4.4%)	High School Grad/GED (3.8%)
Diabetes (4.8%)	Males/65+ (13.6%) Females/55-64 (9.7%)	Hispanic (7.1%)	Both Married & Widowed (5.5%)	<$10,000 (11.4%)	Retired/Unable to Work (11.0%)	Elementary (11.1%)
Low Fruit & Vegetable Consumption (75.7%)	Males/35-44 (89.5%) Females/18-24 (81.8%)	Hispanic (81.5%)	Not Available	<$10,000 (84.6%)	Not Available	Some High School (83.7%)
No Health Care Plan (15.2%)	Males/18-24 (21.5%) Females/18-24 (34.8%)	Hispanic (30.7%)	Unmarried Couple (33.2%)	$15 - $19,999 (36.3%)	Out of Work >1 Year (37.8%)	Some High School (34.0%)
Mammography (14.0%)	Females/40-49 (19.7%)	White (13.8%)	Divorced (19.3%)	< $10,000 (23.8%)	Self-Employed (6.2%)	Some High School (5.2%)
Overweight (BMI) (24.5%)	Males/45-54 (41.7%) Females/55-64 (32.8%)	Black (42.5%)	Married (28.3%)	$15 - $19,999 (32.4%)	Out of Work >1 Year (36.5%)	Never Attended School (34.8%)
Seatbelt Non-Use (25.9%)	Males/18-24 (39.4%) Females/18-24 (26.7%)	Hispanic (29.2%)	Unmarried Couple (42.7%)	<$10,000 (37.0%)	Student (36.7%)	Some High School (36.2%)
Sedentary Lifestyle (59.8%)	Males/45-54 (73.9%) Females/75+ (67.2%)	Hispanic (70.5%)	Never Married (83.0%)	$15 - $19,999 (69.1%)	Out of Work <1 Year (78.0%)	Some High School (71.4%)
Current Smoking (22.9%)	Males/18-24 (38.2%) Females/35-44 (25.9%)	White (24.3%)	Unmarried Couple (42.5%)	<$10,000 (29.8%)	Out of Work <1 Year (34.4%)	Some High School (31.1%)

RISK FACTORS DEFINITIONS

Acute (Binge) Drinking	Respondents reporting they had five or more drinks on one or more occasions, in the past month.
Chronic Drinking	Respondents reporting they had on average 60 or more alcoholic drinks a month.
Drinking and Driving	Respondents reporting they have driven after having too much to drink one or more times in the past month.
Diabetes	Respondents reporting that they have been told by a doctor that they have diabetes.
Fruits & Vegetables	Respondents reporting that they consume less than five servings of fruits and vegetables daily.
Health Care Plan	Respondents reporting that they do not have health care coverage.
Mammography	Female respondents reporting that they have never had a mammogram.
Mammography and Breast Exam	Female respondents reporting that they have never had a mammogram and clinical breast examination.
Overweight	The CDC defines obesity as: females with a BMI (Body Mass Index) $27.3 and males with a BMI $27.8 (BMI is weight in kilograms divided by height in meters squared (W/H^2).
Seat Belt Use	Respondents reporting they "sometimes", "seldom" or "never" use seat belts.
Sedentary Lifestyle	Respondents reporting no physical activity or who reported a physical activity or pair of activities that were done for 20 minutes or less, fewer than three times/week.
Smoking	Respondents reporting smoking 100 cigarettes and who smoke now (regularly and irregularly).

1. INTRODUCTION & DATA UTILIZATION

Arizona has participated in the Behavioral Risk Factor Survey (BRFS) since 1982. Through a cooperative agreement with the Centers for Disease Control and Prevention (CDC), the Arizona Department of Health Services implemented BRFS as a method to collect data on health risk behaviors of adult residents and to monitor the prevalence of these behaviors over time.

After starting in 1982 with paper and pencil data collection, the state advanced in 1986 to the Computer Assisted Telephone Interviewing (CATI) system and converted to the Auto-Telephone system, a version of random digit dialing.

Arizona's sample was drawn from all residents 18 years of age and older with the exception of institutionalized persons. The prevalence estimates for the total population are accurate to within plus- or minus- 3% at the 95% confidence level.

Today, chronic diseases and injuries have become the major cause of morbidity and mortality. In Arizona five of the 10 leading causes of death are due to chronic diseases. The purpose of BRFSS is to provide data that can be used to plan, implement and monitor health promotion and disease prevention efforts, as well as to study the distribution among demographic subgroups.

LEADING CAUSES OF DEATH
IN THE STATE OF ARIZONA, 1995

RANK	CAUSE OF DEATH	NUMBER OF DEATHS	PERCENTAGE OF TOTAL DEATHS
1	Heart Disease	10,104	28.5
2	Cancer	7,993	22.6
3	Cerebrovascular Disease	2,191	6.2
4	Chronic Obstructive Pulmonary Disease	2,037	5.7
5	Influenza and Pneumonia	1,179	3.3
6	Motor Vehicle Related Injuries	1,023	2.9
7	Infectious Parasitic Diseases	996	2.8
8	Other than Motor Vehicle Related Injuries	950	2.7
9	Suicide	858	2.4
10	Diabetes	810	2.3

Source: Arizona Health Status and Vital Statistics, 1995

2. METHODOLOGY

A. SAMPLING DESIGN

Arizona's BRFS uses the Waksberg cluster-based version of random digit dialing. The survey has the potential of representing 97% of the households in Arizona that have telephones (U.S. West Communications data). A cluster size of three was used for maximum efficiency and minimum loss of precision. A sample size of 1,908 interviews over a 12-month period was selected to achieve an acceptable 95% confidence interval (+/- 3%) on risk factor prevalence estimates of the adult population. This means that the percentage found as the estimated prevalence of a risk factor will be accurate to within plus-or minus-3% in 95 of 100 surveys. Prevalence estimates of individual demographic variables do not reflect this level of accuracy.

Interviewers, employed by ADHS, contacted the residences during weekdays between 9:00 a.m. and 9:00 p.m. and Saturdays between 8:30 a.m. and 4:30 p.m. Interviews were collected during a two-week period each month.

After the residence had been contacted, one adult (18 years of age or older) was selected from all adults residing in the household to be interviewed. The response rate for this year's survey was 73.5%.

B. QUESTIONNAIRE

The questionnaire, designed through cooperative agreements with the CDC, was divided into three sections. The first section contained questions on health risk behavior; the second section contained demographic information; and the third section contained optional modules.

C. DATA ANALYSIS

The ADHS Office of Chronic Disease Epidemiology analyzed the data that had been compiled and returned by the CDC. The percentages of each cell were the results of weighted counts based on the 1995 Arizona population to accurately reflect the population demographics.

The weighting factor considered the number of adults and telephone lines in the household, cluster size, stratum size, and age/race/sex distribution of the general population. Unknown and/or refused categories were excluded from the analysis.

D. DEMOGRAPHICS

The demographic information that was collected for Arizona's population included the following: age, race, sex, marital status, employment status, education, and household income. Weighing adjustments were made by the CDC to reflect the actual population estimates of males/females and are represented in the weighted percentages of the data.

3. SURVEY RESULTS

This section describes the results of the Behavioral Risk Factor Surveillance statewide telephone survey of Arizona adult residents.

A. ALCOHOL - CHRONIC

B. ALCOHOL - BINGE

C. ALCOHOL - DRINKING AND DRIVING

D. DIABETES

E. FRUITS AND VEGETABLES

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I. OVERWEIGHT (OBESITY)

J. SEAT BELT USE

K. EXERCISE (SEDENTARY LIFESTYLE)

L. SMOKING

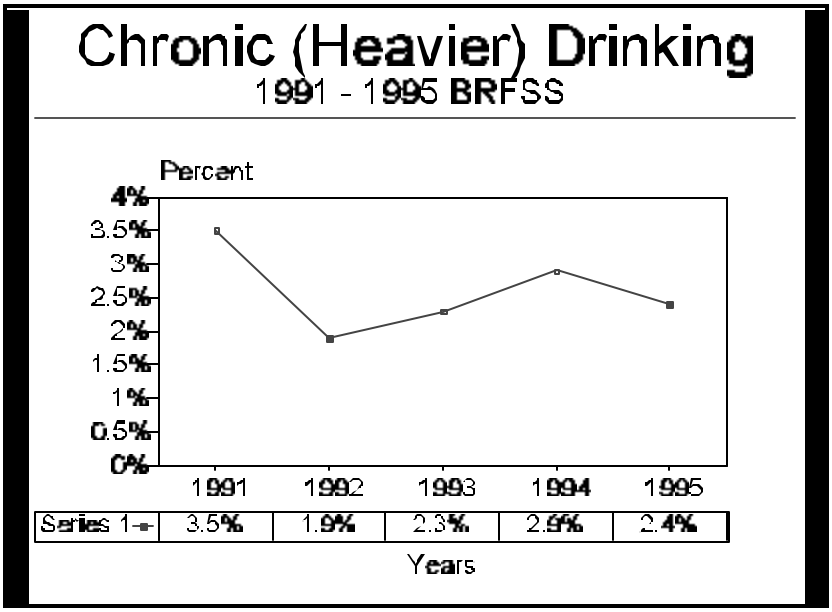
A. ALCOHOL - CHRONIC

CHRONIC (HEAVIER) DRINKING - respondents reporting having two or more drinks per day, i.e., 60 or more per month.

Alcohol abuse is associated with several forms of illness, injury and death. Alcohol is a factor in 50% to 55% of fatal motor vehicle accidents, 29% of serious injury accidents, and 7% of property damage accidents.[1] While material damage occurs, alcohol abuse has a serious health cost impact. Families with an alcohol abusing member incur twice as many health care costs as families without such a member.[2]

According to the 1995 BRFS, 2.4% of all respondents reported chronic drinking behavior. More males (4.3%) reported this behavior than females (0.6%). The 18-24 year age group (4.7%) reported the highest risk for chronic drinking followed by the 25 - 34 year age group (3.3%). Respondents with some college (3.1%) reported the highest incidence of chronic drinking while respondents in the three other education groups reported incidence levels of 0.9% to 2.4%. According to income criteria, respondents reporting total household incomes of less than $10,000 comprised the highest percentage of chronic drinkers (5.3%) followed by the $25 - $34,999 income group (4.6%).

1995 Arizona BRFSS Chronic (Heavier) Drinking	
GROUPS	PERCENTAGE
Sex	
Male	4.3
Female	0.6
Age	
18-24	4.7
25-34	3.3
35-44	1.3
45-54	2.4
55-64	1.4
65+	1.6
Education	
Some High School	0.9
High School Grad or GED	2.4
Some College or Tech School	3.1
College Grad	2.3
Income	
<$10,000	5.3
$10-$14,999	3.0
$15-$19,999	2.0
$20-$24,999	1.2
$25-$34,999	4.6
$35-$49,999	3.4
$50-$74,999	0.6
>=$75,000	1.9



References

1. National Safety Council. Accident Facts 1989 Edition. Chicago, Illinois, 1989.

2. Department of Health and Human Services. ADAMHA update: Treatment for Alcoholism - Impact on Use of Health Care, No. 7. Washington, D.C., July 1986.

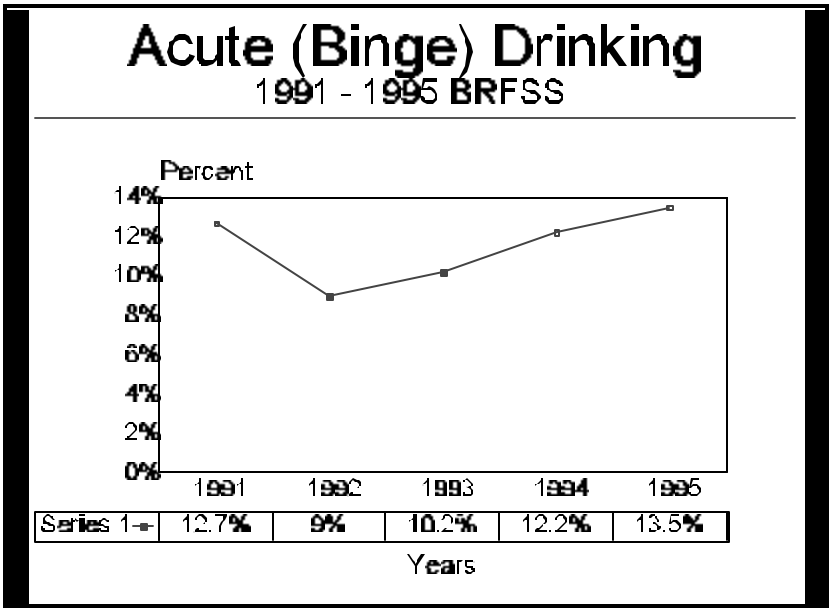
B. ALCOHOL - BINGE

ACUTE (BINGE) DRINKING - Respondents reporting having five or more drinks on one or more occasions during the previous month.

Major hazards to health and well-being occur when alcohol is misused. Medical consequences arise from alcohol toxicity and the increased risk of injury or death while under the influence of alcohol.[1] Costs related to increased health care expense are estimated adequately enough, however other costs related to alcohol misuse are more difficult to measure, i.e. family life disruption, increased crime and violence, lowered self-esteem, increased employee absenteeism and decreased employee performance.

In the 1995 BRFS, 13.5% of all respondents reported binge drinking behavior. Males were at greater risk for acute drinking (20.5%) than females (6.8%) by a 3:1 margin. There appeared to be a general negative correlation between age and risk (as age went up percentage went down) for acute drinking behavior. The 18 - 24 year age group (23.1%) reported the highest incidence followed by the 25 - 34 age group (22.5%). Respondents with some college or technical school (16.5%) were at greatest risk followed by high school graduates or GED (13.7%). Respondents in the $25,000 - $34,999 income group (21.8%) reported the highest incidence of binge drinking followed by those in the $50,000 - $74,999 group (15.9%).

1995 Arizona BRFSS Acute (Binge) Drinking	
GROUPS	PERCENTAGE
Sex	
Male	20.5
Female	6.8
Age	
18-24	23.1
25-34	22.5
35-44	13.2
45-54	9.4
55-64	4.1
65+	4.9
Education	
Some High School	9.8
High School Grad or GED	13.7
Some College or Tech School	16.5
College Grad	10.6
Income	
<$10,000	9.6
$10-$14,999	14.5
$15-$19,999	14.6
$20-$24,999	9.7
$25-$34,999	21.8
$35-$49,999	14.5
$50-$74,999	15.9
>=$75,000	8.5



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1. U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion, U.S. Public Health Service. Disease Prevention/Health Promotion: The Facts. 1988.

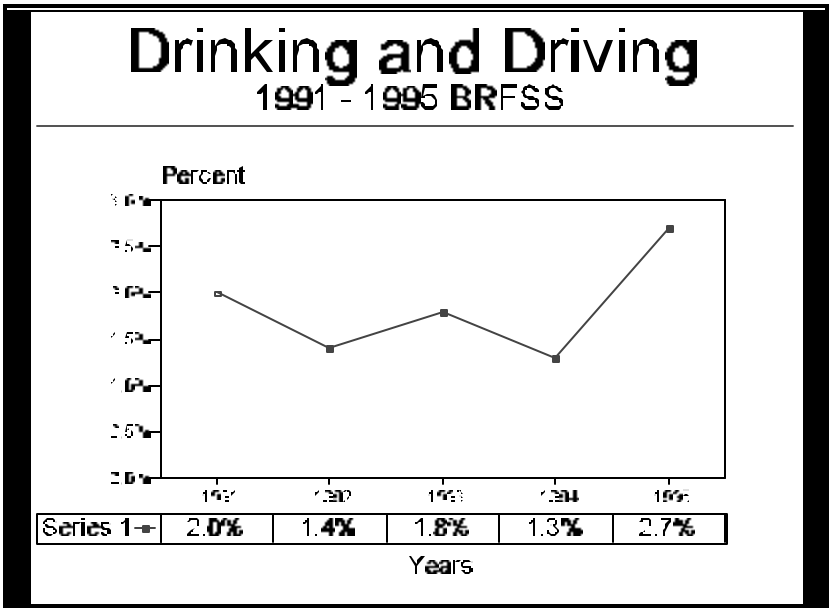
C. ALCOHOL - DRINKING AND DRIVING

DRINKING AND DRIVING - Respondents reporting having driven an automobile one or more times during the past month after having too much to drink.

In Arizona during 1992, alcohol was involved in an estimated 262 traffic fatalities and 7,217 traffic injuries.[1] Over 32% of these traffic fatalities involved a driver, bicyclist, or pedestrian who had been drinking. More than 80% of such crashes involved a blood alcohol concentration (BAC) of more than 0.10%, the legal limit in Arizona for alcohol intoxication. A driver with a BAC exceeding 0.10% is six times more likely than a sober one to have an accident. Young drivers are especially at risk, considering nearly 3,300 teenagers die each year nationally in alcohol-related crashes, making this the number one killer of youth.[2]

In the 1995 BRFS, 2.7% of all respondents reported drinking and driving behavior. More males (3.7%) reported this behavior than females (1.7%) by more than 2:1. The 35 - 44 year old group of respondents (5.5%) reported the highest incidence of drinking and driving with the 25 - 34 year old group next (4.0%). Respondents who are high school graduates or GED (3.8%) reported a higher incidence of drinking and driving with college graduates a relatively close second at 3.4%. The $25,000 - $34,999 income group (6.1%) reported the highest incidence followed by the $35,000 - $49,999 group (3.4%).

1995 Arizona BRFSS Drinking and Driving	
GROUPS	PERCENTAGE
Sex	
Male	3.7
Female	1.7
Age	
18-24	3.4
25-34	4.0
35-44	5.5
45-54	1.2
55-64	0.0
65+	0.4
Education	
Some High School	2.2
High School Grad or GED	3.8
Some College or Tech School	1.7
College Grad	3.4
Income	
<$10,000	2.6
$10-$14,999	1.4
$15-$19,999	1.7
$20-$24,999	1.3
$25-$34,999	6.1
$35-$49,999	3.4
$50-$75,000	2.9
>$75,000	0.7



References

1. Arizona Department of Transportation. Arizona Traffic Accident Summary for 1992. Phoenix: Traffic Records Unit

2. National Safety Council. Accident Facts 1989 Edition. Chicago, Illinois 1988.

D. DIABETES

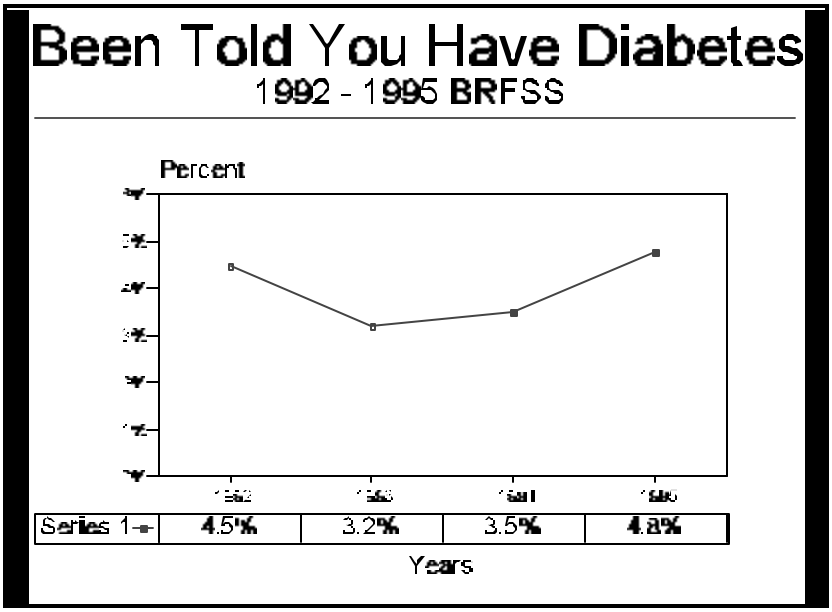
DIABETES - Respondents reporting that they have been told by a doctor that they have diabetes.

Diabetes is associated with long-term complications that affect almost every major part of the body. It can cause blindness, heart disease, strokes, kidney failure, amputations, nerve damage, and birth defects in babies born to women with diabetes. In terms of medical care, treatment supplies, hospitalizations, time lost from work, disability payments, and premature death, diabetes costs this country more than $40 billion annually.[1]

According to the 1995 BRFS, 4.8% of all respondents reported that they were told they have diabetes. More males (5.5%) reported being diabetic than females (4.1%). There appears to be a general positive correlation between age and risk (as age went up the percentage went up) for diabetes. The 55 - 64 year age group (10.4%) reported the highest incidence followed by the 65+ age group (9.4%). Respondents with an elementary level education (11.1%) reported the highest incidence followed by those with some college or technical school (5.6%). The less than $10,000 income group (11.4%) had the highest incidence followed by the $15,000 - $19,999 group (7.7%).

1995 Arizona BRFSS
Ever been told by a doctor you have diabetes

GROUPS	PERCENTAGE
Sex	
Male	5.5
Female	4.1
Age	
18-24	0.4
25-34	0.1
35-44	3.0
45-54	7.0
55-64	10.4
65+	9.4
Education	
Never Attended School	4.0
Elementary	11.1
Some High School	4.7
High School Grad or GED	4.8
Some College or Tech School	5.6
College Grad	2.8
Income	
<$10,000	11.4
$10-$14,999	4.2
$15-$19,999	7.7
$20-$24,999	4.9
$25-$34,999	4.7
$35-$49,999	2.5
$50-$74,999	1.9
>=$75,000	6.8



1. Diabetes Overview, 1993, Vol. 92 Issue 3235, p1, 5p.

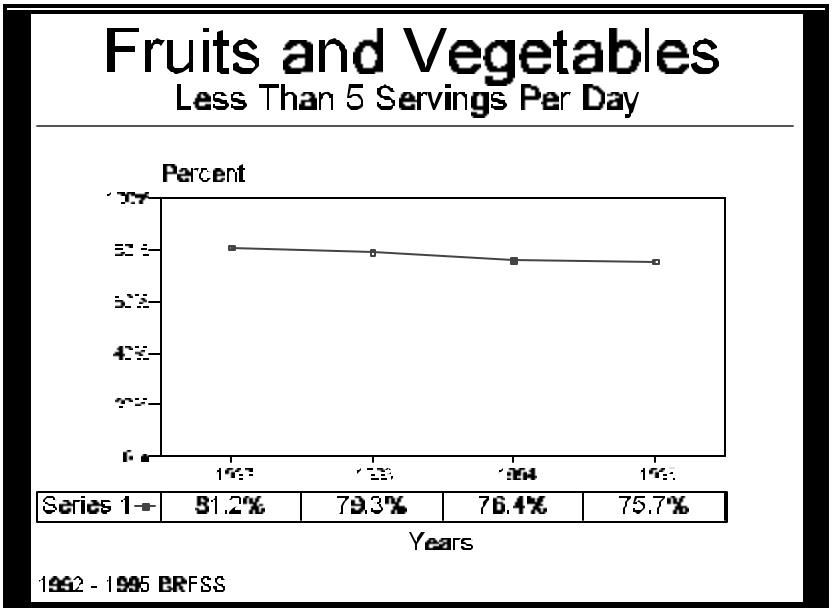
E. FRUITS AND VEGETABLES

FRUITS & VEGETABLES - Respondents reporting that they consume less than five servings of fruits and vegetables daily.

One of the national objectives in "Healthy People 2000" is for members of the public to increase their consumption of fruits and vegetables to five or more servings daily. Studies have indicated that a variety of fruits and vegetables are associated with a reduced risk of cancer. These included dark green, yellow, and orange fruits and vegetables, cruciferous vegetables, dried fruits, berries, beans, tomatoes, and carrots.[1]

According to the 1995 BRFS, 75.7% of all respondents reported eating fewer than five servings of fruits and vegetables. More males (80.8%) reported this behavior than females (70.8%). The 18 - 24 year age group (84.8%) were least likely to consume the recommended number of servings followed by the 35 to 44 age group (82.4%). Respondents with some high school (83.7%) were the least likely to consume five servings next were those who had an elementary education (80.6%). Respondents in the two lowest income groups, less than $10,000 (84.6%) and the $10,000 - $14,999 income group (81.9%) were less likely to eat the recommended number of servings.

1995 Arizona BRFSS Less than 5 servings of fruits and vegetables	
GROUPS	PERCENTAGE
Sex	
Male	80.8
Female	70.8
Age	
18-24	84.8
25-34	80.7
35-44	82.4
45-54	77.0
55-64	63.1
65+	62.1
Education	
Never Attended School	45.2
Elementary	80.6
Some High School	83.7
High School Grad or GED	79.8
Some College or Tech School	72.9
College Grad	74.5
Income	
<$10,000	84.6
$10-$14,999	81.9
$15-$19,999	73.1
$20-$24,999	68.1
$25-$34,999	77.2
$35-$49,999	76.0
$50-$74,999	76.6
>=$75,000	68.6



1. Public Health Reports, Jan/Feb95, Vol. 110 Issue 1, p68, 12p.

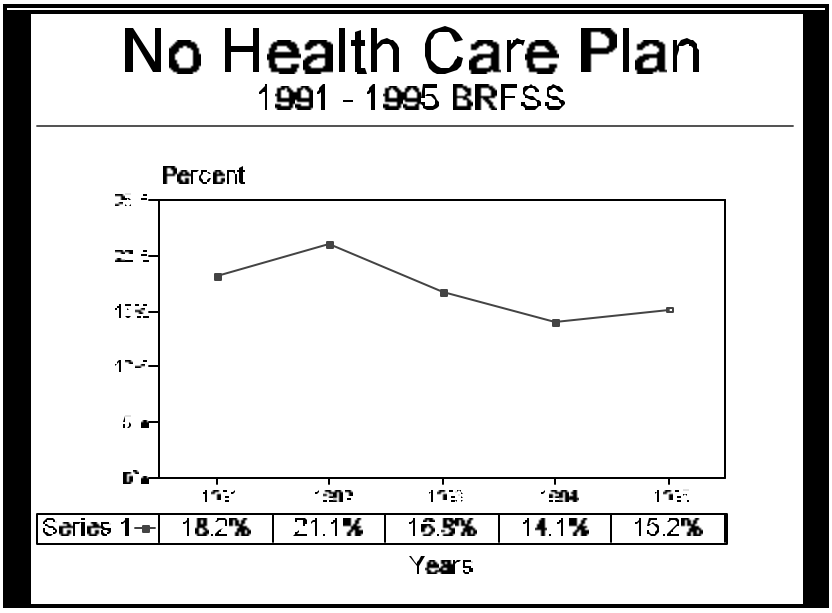
F. HEALTH CARE

HEALTH CARE - Respondents reporting that they do not have health care coverage.

According to the nationwide 1993 BRFS, the percentage of adults aged 18 to 64 years who reported not having any health care insurance varied nearly fourfold across states - from 6.8% in Hawaii to 25.5% in Louisiana (median = 14.9%). More than one-fifth of adults in seven states (California, Florida, Louisiana, Nevada, New Mexico, Oklahoma, and Texas) reported being uninsured. Men (15.6%) were only slightly more likely than women (14.0%) to report not having health insurance.[1]

According to the 1995 BRFS, 15.2% of all respondents reported not having health care coverage. Males (15.7%) were more likely than females (14.6%) not to have health care coverage. More respondents in the 18 - 24 year age group (28.0%) did not have health care coverage than any other age group. Respondents who had some high school education (34.0%) were at greatest risk followed by high school graduates or GED (26.0%). There appears to be a general negative correlation regarding income. Respondents in the $15,000 - $19,999 group (36.3%) followed by the less than $10,000 (36.1%) were more likely not to have health care coverage than the other income groups.

1995 Arizona BRFSS Does not have health care coverage	
GROUPS	PERCENTAGE
Sex	
Male	15.7
Female	14.6
Age	
18-24	28.0
25-34	19.1
35-44	17.6
45-54	17.3
55-64	10.0
65+	0.7
Education	
Never Attended School	3.1
Elementary	25.7
Some High School	34.0
High School Grad or GED	26.0
Some College or Tech School	12.1
College Grad	8.0
Income	
<$10,000	36.1
$10-$14,999	34.1
$15-$19,999	36.3
$20-$24,999	26.9
$25-$34,999	11.6
$35-$49,999	5.7
$50-$74,999	4.7
>=$75,000	0.0



1. Health Risks in America, Gaining Insight From the Behavioral Risk Factor Surveillance System, 1995, p13.

G. MAMMOGRAPHY

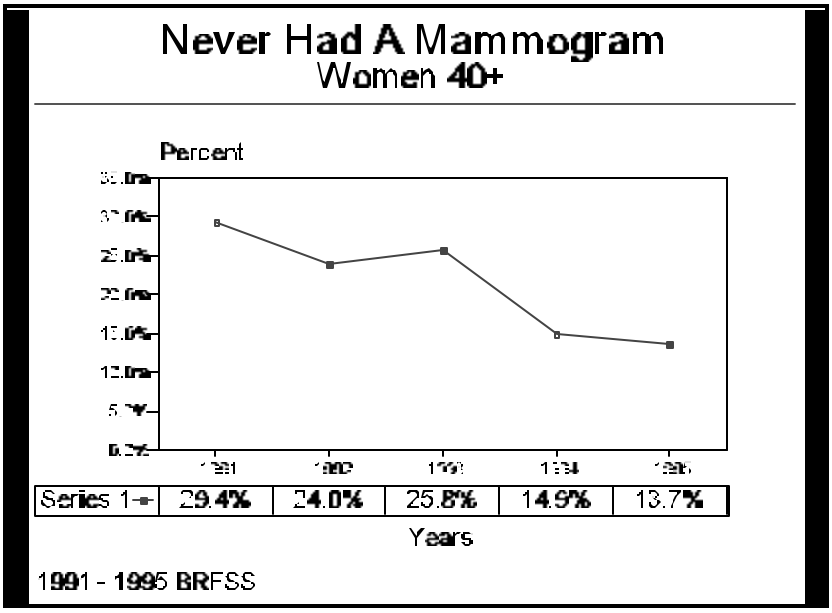
MAMMOGRAPHY - Female respondents reporting that they have never had a mammogram.

The key to reduction in breast cancer mortality depends on successful interventions and early detection. It is recommended that the screening process begin by age 40 and consist of annual clinical examinations with a mammogram every 1 to 2 years through age 49. Annual screening mammograms at age 50 or older should be performed in conjunction with annual clinical breast examinations.[1]

Based on the 1995 BRFS, 13.7% of the female respondents age 40 and older said they never had a mammogram. More respondents in the other race group (16.1%) reported not having a mammogram than any other racial/ethnic group. There appears to be a negative correlation between education and not having a mammogram. More respondents with some high school (25.2%) and those who were high school graduates/GED (13.9%) said they never had a mammogram compared to those who attended college. Respondents whose incomes were less than $10,000 (23.8%) were more likely not to have had a mammogram than those in the higher income groups.

1995 Arizona BRFSS
Never had a mammogram
Women 40+ years

GROUPS	PERCENTAGE
Age	
40-49	19.7
50-59	9.3
60-69	6.6
70+	16.3
Race	
White/Non-hispanic	13.8
Hispanic	12.8
Other	16.1
Education	
Some High School	25.2
High School Grad or GED	13.9
Some College or Tech School	12.2
College Grad	10.3
Income	
<$10,000	23.8
$10-$14,999	20.7
$15-$19,999	10.7
$20-$24,999	16.4
$25-$34,999	14.3
$35-$49,999	23.2
$50-$74,999	4.4
>=$75,000	5.0



NOTE: Percentages may not always sum to 100% due some respondents reporting that they "don't know/not sure" or "refused" to that particular question.

1. U.S. Department of Health and Human Services, National Institute of Health. "Promoting Mammography Screening". 1990. NIH Publication No. 90-497.

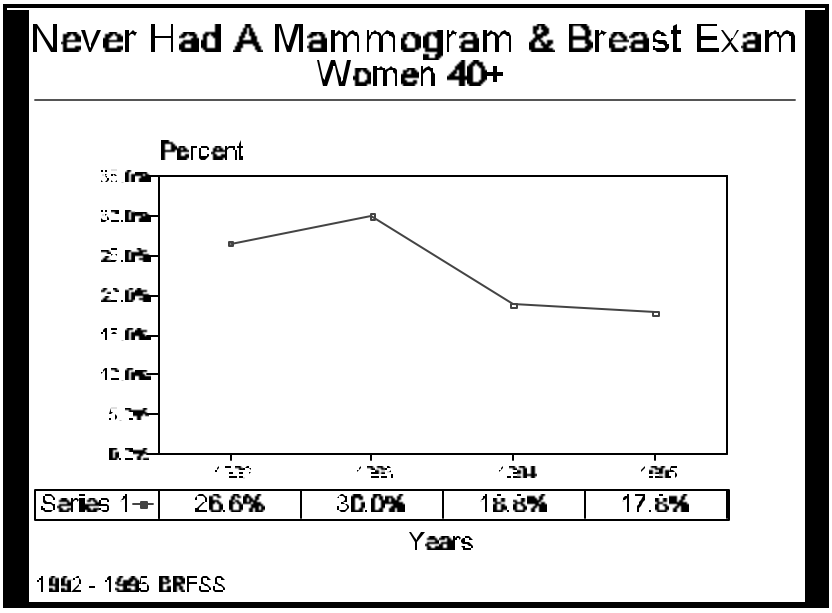
H. MAMMOGRAPHY AND BREAST EXAM

MAMMOGRAPHY AND BREAST EXAM - Female respondents reporting that they have never had a mammogram and clinical breast examination.

According to the American Cancer Society, women from 40 to 49 years of age should receive a clinical breast examination every three years and women aged 50 and older should receive an annual examination.

The 1995 BRFS found that 17.8% of the female respondents age 40 and older had never had a mammogram and a clinical breast exam. Respondents in the 40 - 49 age group (22.0%) followed by the 70+ age group (21.0%) were more likely to not have had these screening tests. Other race respondents (24.0%) were the most likely to not have both exams, next were Hispanics (20.7%). There appears to be a negative correlation between education and not having a mammogram and clinical breast exam. Respondents with some high school (28.6%) were most at risk followed by those who were high school graduates/GED (18.9%). Respondents in the less than $10,000 income group (25.9%) and the $10,000 - $14,999 group (25.2%) were most likely to not have had either screening test.

1995 Arizona BRFSS Never had a mammogram & breast exam Women 40+ years	
GROUPS	PERCENTAGE
Age	
40-49	22.0
50-59	11.3
60-69	15.5
70+	21.0
Race	
White/Non-hispanic	17.3
Black/Non-hispanic	4.7
Hispanic	20.7
Other	24.0
Education	
Some High School	28.6
High School Grad or GED	18.9
Some College or Tech School	16.9
College Grad	11.7
Income	
<$10,000	25.9
$10-$14,999	25.2
$15-$19,999	15.1
$20-$24,999	19.1
$25-$34,999	22.9
$35-$49,999	23.5
$50-$74,999	4.4
>=$75,000	9.7



NOTE: Percentages may not always sum to 100% due some respondents reporting that they "don't know/not sure" or "refused" to that particular question.

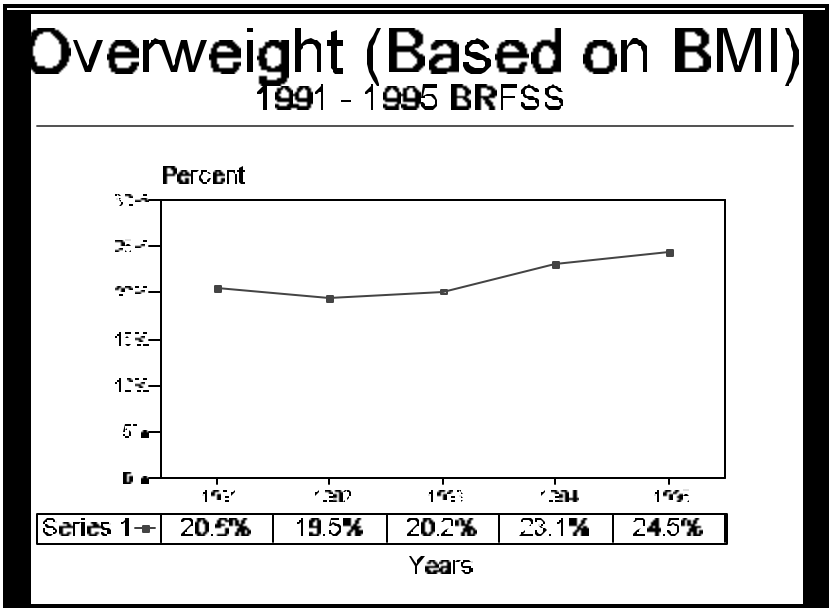
I. OVERWEIGHT (OBESITY)

OVERWEIGHT - The CDC defines obesity as: females with a BMI (Body Mass Index) $27.3 and males with a BMI $27.8 (BMI is weight in kilograms divided by height in meters squared (W/H²).

The following are some factors included in the pathogenesis of obesity: excess caloric intake, decreased physical activity, and metabolic and endocrine abnormalities. Obesity is more likely to lead to coronary heart disease, hypertension, hypercholesterolemia and diabetes mellitus. Higher mortality rates from cancer have also been attributed to obesity.[1] Persons suffering from obesity are 2.9 times more likely to suffer from hypertension. Even moderately obese people (110% to 120% of ideal body weight) under the age of 50 are more likely to suffer from hypertension than people of normal body weight.[2] Diabetes mellitus and high serum cholesterol levels are respectively 2.1 and 2.9 times more likely to be present in obese people.[3]

According to the 1995 BRFS, 24.5% of all respondents said they were overweight. More males (26.5%) reported being overweight than females (22.6%). More respondents in the 45 - 54 year age group (34.0%) and the 35 - 44 age group (31.0%) said they were overweight. Respondents never attending school (34.8%) were at greatest risk followed by those with an elementary school education (29.9%.) Respondents in the $15,000 - $19,999 income group (32.4%) had the highest incidence followed by the those in the $20,000 - $24,999 group (29.5%).

1995 Arizona BRFSS Overweight (Based on BMI)	
GROUPS	PERCENTAGE
Sex	
Male	26.5
Female	22.6
Age	
18-24	8.1
25-34	18.1
35-44	31.0
45-54	34.0
55-64	30.4
65-74	29.7
75+	17.4
Education	
Never Attended School	34.8
Elementary	29.9
Some High School	25.4
High School Grad or GED	25.0
Some College or Tech School	26.4
College Grad	19.3
Income	
<$10,000	21.6
$10-$14,999	18.1
$15-$19,999	32.4
$20-$24,999	29.5
$25-$34,999	27.8
$35-$49,999	27.9
$50-$74,999	18.1
>=$75,000	21.9



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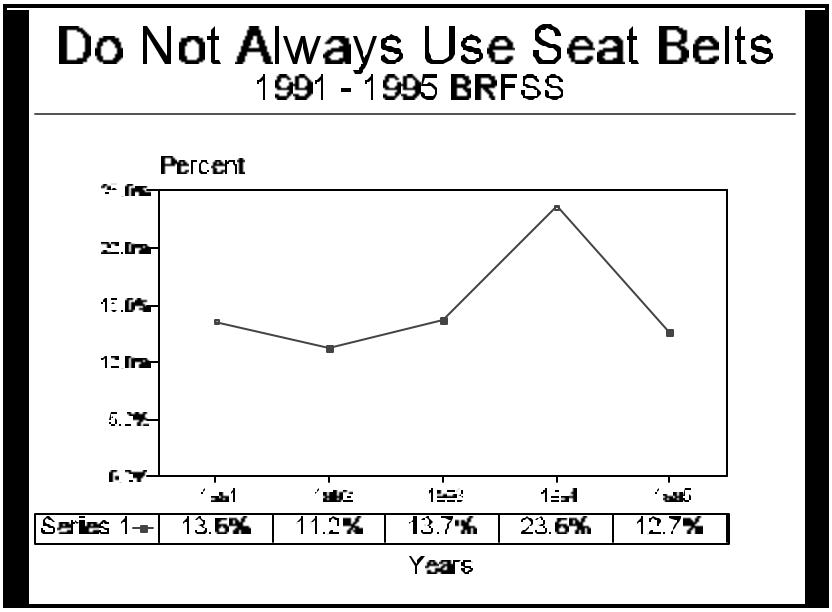
J. SEAT BELT USE

SEAT BELT USE - Respondents reporting they "sometimes", "seldom" or "never" use seat belts.

The Arizona Department of Transportation's report "Arizona Traffic Accident Summary for 1992" indicated 81% of all drivers involved in an accident were using seat belts and 80% of all passengers age 5 and older were secured.[1] In 1992, every 10.9 hours a traffic-related death occurred and 73 persons were injured in Arizona.[2] Risks of injury, death and related economic costs are reduced by 50% or more when driving with secured seat belts.[3]

According to the 1995 BRFS, 12.7% of all respondents said they did not always use seat belts. More males (16.6%) reported this behavior than females (8.9%). The 18 - 24 year age group (19.2%) were more likely to not use seat belts, followed by the 25 - 34 age group (17.4%). Respondents with some high school (24.5%) were at greatest risk, next were the high school graduate/GED group (14.1%). The below $10,000 income group (22.1%) had the highest risk followed by the $15,000 - $19,999 group (16.4%).

1995 Arizona BRFSS Do Not Always Use Seat Belts	
GROUPS	PERCENTAGE
Sex	
Male	16.6
Female	8.9
Age	
18-24	19.2
25-34	17.4
35-44	10.3
45-54	14.0
55-64	7.4
65+	7.5
Education	
Elementary	11.5
Some High School	24.5
High School Grad or GED	14.1
Some College or Tech School	13.1
College Grad	8.0
Income	
<$10,000	22.1
$10-$14,999	15.8
$15-$19,999	16.4
$20-$24,999	11.7
$25-$34,999	8.5
$35-$49,999	14.6
$50-$74,999	10.1
>=$75,000	9.9



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2. Arizona Department of Transportation. Arizona Traffic Accident Summary, 1992. Phoenix: Traffic Records Unit.

3. Campbell, B.J. Safety Belt Injury Reduction Related to Crash Severity and Front Seated Position, publication PR129, Chapel Hill, NC: University of North Carolina Highway Safety Research Center, 1984.

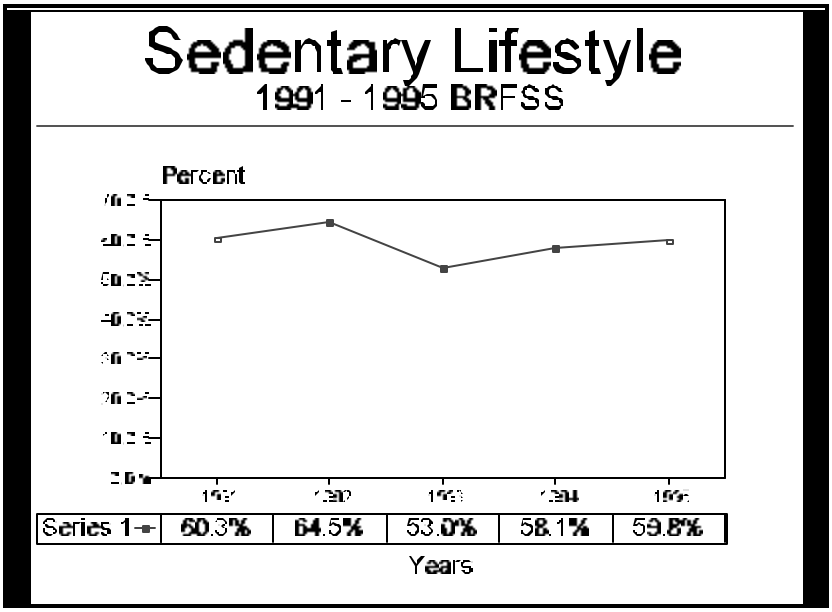
K. EXERCISE (SEDENTARY LIFESTYLE)

EXERCISE (SEDENTARY LIFESTYLE) - Respondents reporting no physical activity or who reported a physical activity or pair of activities that were done for 20 minutes or less, fewer than three times/week.

Physical activity and exercise are critical elements in the promotion of health in adults. Increased levels of physical activity reduce the risk of hypertension, diabetes mellitus, colon cancer and osteoporosis.[1] Exercise and physical activity may also retard or prevent age related cerebral atherogenesis and sustain cognitive abilities.[2] It can help to maintain weight and increase longevity.[3] High energy exercise (more than 8,500 kilo calories per week) significantly reduces the risk of coronary heart disease. It has been estimated that exercise can reduce death rates from coronary heart disease by 30% to 50%.[4]

According to the 1995 BRFS, 59.8% of all respondents are at risk for a sedentary lifestyle. Females had a slightly greater risk (60.3%) than males (59.3%). The 45 - 54 year age group (67.4%) had the greatest risk followed by the 35 - 44 age group (65.6%). Risk for sedentary lifestyle was highest for respondents with some high school (71.4%) followed by with an elementary level education (69.3%). Respondents in the $15,000 - $19,999 income group (69.1%) had the highest risk followed by those in the less than $10,000 group (66.5%).

1995 Arizona BRFSS Sedentary Lifestyle	
GROUPS	PERCENTAGE
Sex	
Male	59.3
Female	60.3
Age	
18-24	56.2
25-34	56.8
35-44	65.6
45-54	67.4
55-64	53.8
65+	57.3
Education	
Never Attended School	62.8
Elementary	69.3
Some High School	71.4
High School Grad or GED	64.8
Some College or Tech School	61.1
College Grad	47.3
Income	
<$10,000	66.5
$10-$14,999	62.5
$15-$19,999	69.1
$20-$24,999	64.8
$25-$34,999	63.0
$35-$49,999	53.9
$50-$74,999	49.2
>=$75,000	53.5



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3. Paffenbarger, Ralph S., et al: Physical Activity, All-Cause Mortality, and Longevity of College Alumni. New England Journal of Medicine, Vol. 314: 1986. pp 605-613.

4. Dishmas, Rodo K., ed. Exercise Adherence: It's Impact on Public Health. "Exercise Adherence, Coronary Heart Disease, and Longevity" Paffenbarger, Ralph S., and Hyde, Robert T.: pp 41-73. Champaign, Illinois: Human Kinetics Books.

L. SMOKING

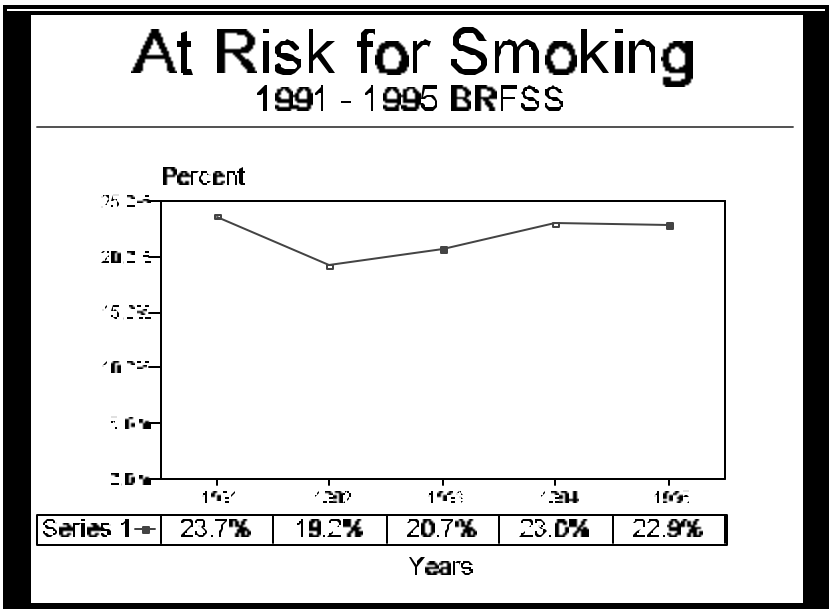
SMOKING - Respondents reporting smoking 100 cigarettes and who smoke now (regularly and irregularly).

C. Everett Koop, M.D., former Surgeon General of the United States, described smoking as the "chief, single AVOIDABLE cause of death in our society"[1]. For many years the health effects of smoking have been well documented and it has been determined that cigarette smoking is a major contributor to deaths from heart disease, lung disease and cancer.[2]

The major voluntary health agencies (American Cancer Society, American Heart Association and American Lung Association) have joined forces to achieve "Smoke Free Class of 2000" aimed at schools nationwide.[3] Also, the Surgeon General has proclaimed a goal of a "Smoke-Free Society by the Year 2000".[4] Joint efforts among schools, employers, community organizations, government agencies and public health organizations need to be employed to achieve these goals.

According to the 1995 BRFS, 22.9% of all respondents identified themselves as smokers. More males (26.8%) said they were smokers than females (19.1%). The 18 - 24 year age group (31.5%) had the greatest incidence of smoking followed by the 45 - 54 age group (27.3%). Respondents with some high school (31.1%) were at greatest risk with those in the high school graduate/GED group (28.4%). Respondents in the below $10,000 income group (29.8%) had the highest incidence of smoking followed by the $10,000 - $14,999 group (28.3%).

1995 Arizona BRFSS Current Smoking	
GROUPS	PERCENTAGE
Sex	
Male	26.8
Female	19.1
Age	
18-24	31.5
25-34	22.3
35-44	26.4
45-54	27.3
55-64	18.6
65+	12.1
Education	
Elementary	13.6
Some High School	31.1
High School Grad or GED	28.4
Some College or Tech School	24.9
College Grad	13.4
Income	
<$10,000	29.8
$10-$14,999	28.3
$15-$19,999	27.3
$20-$24,999	24.9
$25-$34,999	27.4
$35-$49,999	22.1
$50-$74,999	16.4
>=$75,000	12.1



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